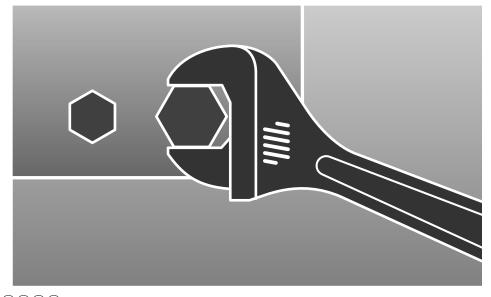


INSTALLATION MANUAL MANUAL DE INSTALACIÓN MANUEL D'INSTALLATION MANUALE D'INSTALLZIONE MANUAL DE INSTALAÇÃO INSTALLATIONS-HANDBUCH ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ ИНСТРУКЦИЯ ΠΟ УСТАНОВКЕ

MH18VP2X MH19VP2X MH052FXEA2 MH068FXEA4 MH080FXEA4

Free Joint Multi Air Conditioner (Cool and Heat)
Acondicionador de aire libre del empalme multi (Refrigeración y Calefacción)
Climatiseur Free Joint Multi (Refroidissement et Chauffage)
Aria condizionata Free Joint Multi (Raffreddamento e Riscaldamento)
Free Joint Multi ar condicionado (Refrigeração e Aquecimento)
Free Joint Multi Klimaanlage (Kühlen und Wärmen)
Πολλαπλό Κλιματιστικό Μηχάνημα Ελεύθερης Ένωσης (Ψύξης - Θέρμανσης)
Μησιοφγηκιμο Βοσοματιστικό Κοημαμιστικό Κοραμιστικό Κοραμανσης (Οχρακαθείνα ο Οδοιτρεβ)



Safety Precautions

The following safety precautions must be taken when using your air conditioner.



Risk of electric shock. • Can cause injury or death. • Disconnect all remote electric power supplies before servicing, installing or cleaning. • This must be done by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard.

INSTALLING THE UNIT

- The unit should not be installed by the user. Ask the dealer or authorized company to install the units except room air conditioners for the U.S.A and Canada area.
- If the unit is installed improperly, water leakage, electric shock or fire may result
- The air conditioner must be installed in accordance with national wiring regulations and safety regulations wherever applicable.
- Mount with the lowest moving parts at least 2.5 m above the floor or grade level. (If applicable)
- The manufacturer does not assume responsibility for accidents or injury caused by an incorrectly installed air conditioner. If you are unsure about installation, contact an installation specialist.
- When installing the built-in type air conditioner, keep all electrical cables such as the power cable and the connection cord in pipe, ducts, cable channels e.t.c to protect them against liquids, outside impacts and so on.

POWER SUPPLY LINE, FUSE OR CIRCUIT BREAKER

- If the power cord of this air conditioner is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The unit must be plugged into an independent circuit if applicable or connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixed wiring with a contact opening of >3mm.
- ◆ Do not use an extension cord with this product.
- If the unit is equipped with a power supply cord and a plug, the plug must be accessible after installation.
- This appliance must be installed accordance with the national wiring regulations.

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Deciding on Where to Install the Air Conditioner

When deciding on the location of the air conditioner with the owner, the following restrictions must be taken into account.

General

Do NOT install the air conditioner in a location where it will come into contact with the following elements:

- ◆ Combustible gases
- Saline air
- Machine oil
- Sulphide gas
- Special environmental conditions

If you must install the unit in such conditions, first consult your dealer.

Outdoor Unit

- The outdoor unit must NEVER be placed on its side or upside down, as the compressor lubrication oil will run into the cooling circuit and seriously damage the unit.
- Choose a location that is dry and sunny, but not exposed to direct sunlight or strong winds.
- ◆ Do not block any passageways or thoroughfares.
- Choose a location where the noise of the air conditioner when running and the discharged air do not disturb any neighbours.
- Choose a position that enables the piping and cables to be easily connected to the indoor unit and the recommended length of 7.5 metres to be respected. (1 Unit)
- Install the outdoor unit on a flat, stable surface that can support its weight and does not generate any unnecessary noise and vibration.
- Position the outdoor unit so that the air flow is directed towards the outside, as indicated by the arrows on the top of the unit
- Maintain sufficient clearance around the outdoor unit, as indicated in the diagram on the page opposite.
- If the outdoor unit is installed at a height, ensure that its base is firmly fixed in position; the maximum height is 7 metres.
- Make sure that the water dripping from the drain hose runs away correctly and safely.

CAUTION -

- ♦ You have just purchased a Free Joint Multi air conditioner and it has been installed by your installation specialist.
- ♦ This device must be installed according to the national electrical rules.
- ♦ Max input power & current is measured according to IEC standard and input power & current is measured according to ISO standard.

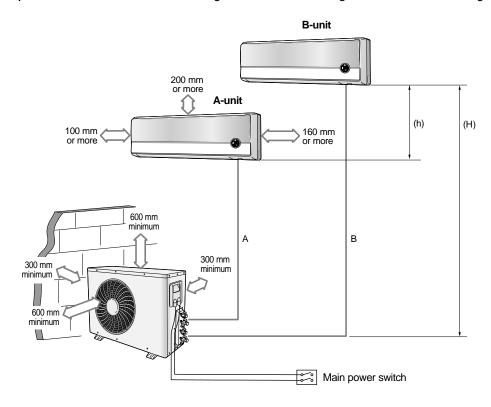
♦ MH18VP2X

♦ MH19VP2X

Indoor unit	Outdoor unit	Power supply Ø, V, Hz
MH18VP2-09	MH18VP2X	1,220-240~,50

Indoor unit	Outdoor unit	Power supply Ø, V, Hz
MH19VP2-07	MUMOV/DOV	1 220 240 50
MH19VP2-12	MH19VP2X	1,220-240~,50

Respect the clearances and maximum lengths indicated in the diagram below when installing the unit.



▶ Piping length and the height

	1 Room max length	2 Room total max length	Max height between indoor unit & outdoor unit	Max height between indoor units
Dimension	20 m	40 m	15 m	3m
Composition	A, B	A + B	(H)	(h)

▶ Piping outside diameter

Unit	Outer Diameter			
J Orint	Liquid	Gas		
MH18VP2-09				
MH19VP2-07	1/4″	3/8″		
MH19VP2-12				

Deciding on Where to Install the Air Conditioner (Continued)

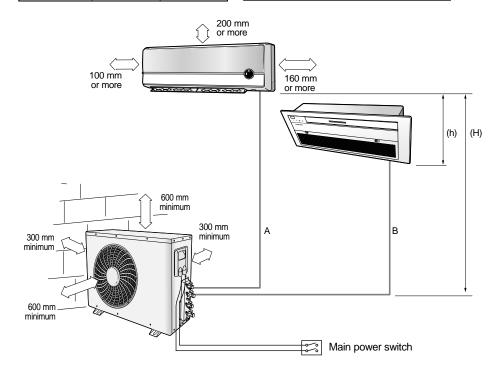
♦ MH052FXEA2

* The split type, 1-way cassette indoor units can be installed together.

▶ Piping outside diameter

Indoor unit	Outdoor unit	Power supply Ø, V, Hz
20/26/35	MH052FXEA2	1, 220-240, 50

Unit	Outside	diameter	
Oniii	Liquid	Gas	
20/26/35	1/4″	3/8″	



▶ Piping length and the height

	1 Room max length	2 Room total max length	Max height between indoor unit & outdoor unit	Max height between indoor units
Dimension	20 m	40 m	15 m	3 m
Composition	A, B	A + B	(H)	(h)

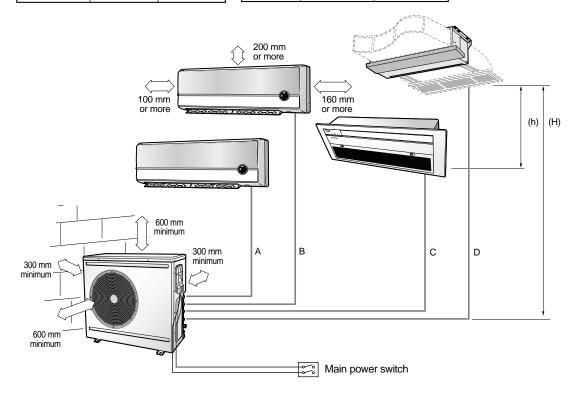
♦ MH068FXEA4 / MH080FXEA4

* The split type, 1-way cassette, duct type indoor units can be installed together.

▶ Piping outside diameter

Indoor unit	Outdoor unit	Power supply Ø, V, Hz
23/26/35/52	MH068FXEA4 MH080FXEA4	1, 220-240, 50

Unit	Outside	diameter		
Onit	Liquid	Gas		
23/26/35	1/4 ″	3/8 ″		
52	1/4 ″	1/2″		



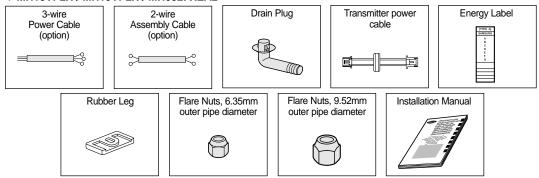
▶ Piping length and the height

	1 Room max length	2 Room total max length	3 Room total max length		Max height between indoor unit & outdoor unit	Max height between indoor units
Dimension	25 m	30 m	45 m	70 m	15 m	3 m
Composition	A, B, C, D	A + B	A + B + C	A + B + C + D	(H)	(h)

Air Conditioner and Accessories

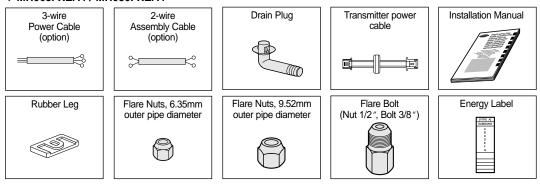
The following accessories are supplied with the air conditioner. Accessories in the Outdoor Unit Case

♦ MH18VP2X / MH19VP2X / MH052FXEA2



* Attach Energy Label to the outdoor unit properly when installing.

♦ MH068FXEA4 / MH080FXEA4

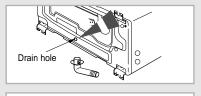


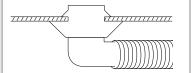
- * Attach Energy Label to the outdoor unit properly when installing.
- > The 3-wire power cable and the 2-wire assembly cable are optional. If these cables are not supplied, use the standard cable approved by IEC standard.

The specification for cables:

Use	AWG	Cross sectional area (mm²)
3-wire power cable for main power supply	13 or fewer	2.5 or more
3-wire power cable for indoor power supply	16 or fewer	1.5 or more
2-wire assembly cable for communication	16 or fewer	1.5 or more

Installing and Connecting the Outdoor Unit Drain Hose





When using the air conditioner in the heating mode, ice may accumulate. During de-icing, the condensed water must be drained off safely. Consequently, you must install a drain hose on the outdoor unit, following the instructions below.

- 1 Insert the drain plug into the drain hole on the underside of the outdoor unit.
- 2 Connect the drain hose to the drain plug.
- 3 Ensure that the drained water runs off correctly and safely.

Cutting/Extending the Piping

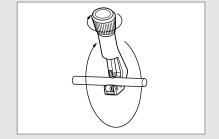
- Make sure that you have the required tools available (pipe cutter, reamer, flaring tool and pipe holder).
- 2 If you wish to shorten the piping, cut it using a pipe cutter, taking care to ensure that the cut edge remains at a 90° angle with the side of the pipe, and referring to the illustrations below for examples of edges cut correctly and incorrectly.











- 3 To prevent any gas from leaking out, remove all burrs at the cut end of the pipe, using a reamer.
- 4 Slide a flare nut on to the pipe and modify the flare.

Outer Diameter(D)	Depth(A)
6.35 mm	1.3 mm
9.52 mm	1.8 mm
12.70 mm	2.0 mm

5 Check that the flaring is correct, referring to the illustrations below for examples of incorrect flaring.



Inclined



Damaged Surface



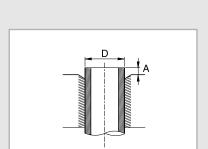
Cracked

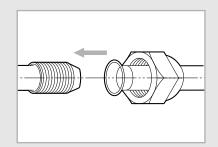


Align the pipes to be connected and tighten the flare nuts first manually and then with a torque wrench, applying the following torque.

Outer Diameter	Torque(kgf•cm)
6.35 mm	140~170
9.52 mm	250~280
12.70 mm	380~420

7 For further details on how to connect up to the outdoor unit and purge the circuit, refer to page 17.

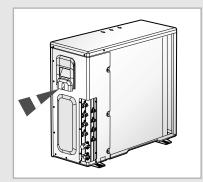




Connecting the Cables to the Outdoor Unit

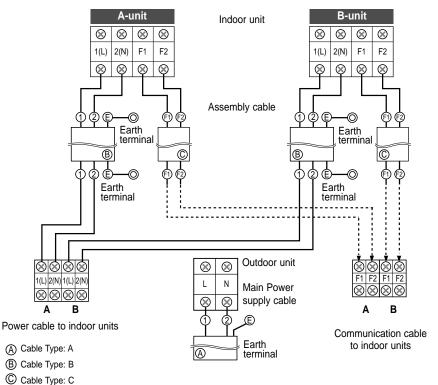
2 electric cables must be connected to the outdoor unit:

- ♦ The assembly cable connecting the indoor unit to the outdoor unit.
- The power cable connecting the auxiliary circuit breaker to the outdoor unit.
- 1 Remove the terminal board cover on the side of the outdoor unit.
- 2 Connect the assembly cable with the power cable such as figure.
 - Each wire is labelled with the corresponding terminal number.
 - Ensure the wire number of the indoor unit and the terminal number of the outdoor unit.
- 3 Connect the earth wires to the earth terminals.
 - Refer to the page 16 for further details on how to check that earthing is correct.
- 4 Fix the cables with cable clamps near terminal blocks to protect the wire connection to the terminals from force on the wire.
- 5 Replace the terminal board cover, carefully tightening the screw.
- **6** Connect the power cable to the auxiliary circuit breaker.



* The designs and shape are subject to change according to the model.

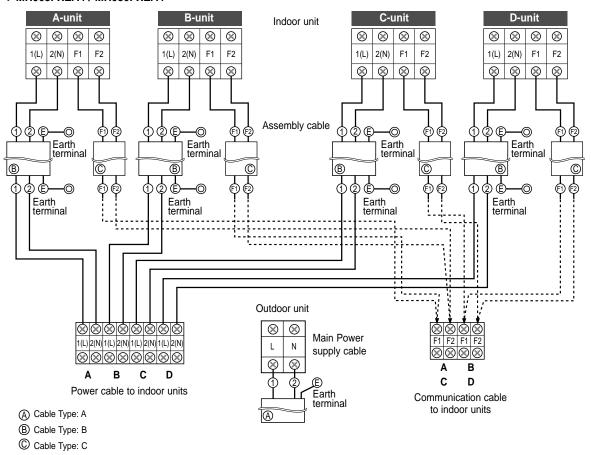
♦ MH18VP2X / MH19VP2X / MH052FXEA2



The specification for cables:

Туре	Use	AWG	Cross sectional area (mm²)
A	Main Power Supply 3-wire power cable	13 or fewer	2.5 or more
B	Indoor Power Supply 3-wire power cable	16 or fewer	1.5 or more
©	2-wire assembly cable	16 or fewer	1.5 or more

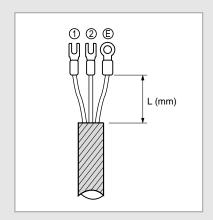
◆ MH068FXEA4 / MH080FXEA4

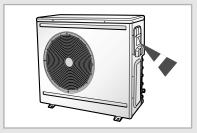


The specification for cables:

Туре	Use	AWG	Cross sectional area (mm²)
A	Main Power Supply 3-wire power cable	13 or fewer	2.5 or more
B	Indoor Power Supply 3-wire power cable	16 or fewer	1.5 or more
0	2-wire assembly cable	16 or fewer	1.5 or more

Connecting the Cables to the Outdoor Unit (Continued)





* The designs and shape are subject to change according to the model.

Preparation of cables for outdoor unit terminal block

▶ Main power supply cable : L(mm)

Cable of indoor unit	1	2	Ē
Main Power	20	20	90

Power cable to indoor units : L(mm)

Cable of indoor unit	1	2	(E)	Remark
A	60	60	80	
В	60	60	80	
С	70	70	110	For **068 / 080** only
D	90	90	90	For **068 / 080** only

▶ Communication cable to indoor units : L(mm)

Cable of indoor unit	1	2	Remark
A			
В	15	15	
С	1	13	For **068 / 080** only
D			For **068 / 080** only

Transmitter Installation (Optional)

♦ MH18VP2X / MH19VP2X / MH052FXEA2

Accessories (Transmitter)

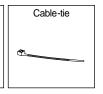




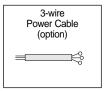


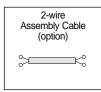


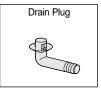




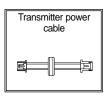
Accessories (Outdoor Unit)

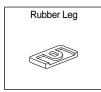






Flare Nuts, 9.52mm



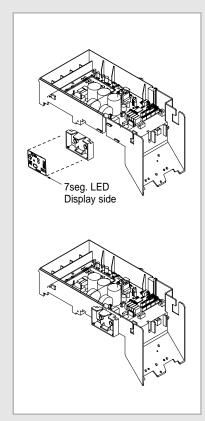








- 1 Fix the case at 3 hinges on the side of the control box in the outdoor unit. (See the picture)
- 2 Attach the transmitter PCB to the case in the control box in the outdoor unit, then connect the power and the communication cable between the transmitter and the outdoor unit; refer to the figure of page 15.
- 3 If you install a transmitter to an outdoor unit, every indoor unit which is connected to an outdoor unit can be controlled simultaneously.
- 4 Each outdoor unit connected to the same centralized controller has its own transmitter.



Fix the case with hinges (Control Box in the outdoor unit)

Transmitter Installation (Optional) (Continued)

♦ MH068FXEA4 / MH080FXEA4 Accessories (Transmitter)









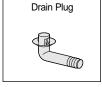


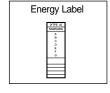


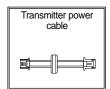
Accessories (Outdoor Unit)







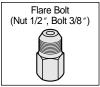


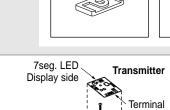




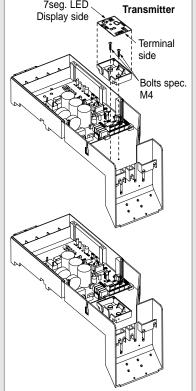




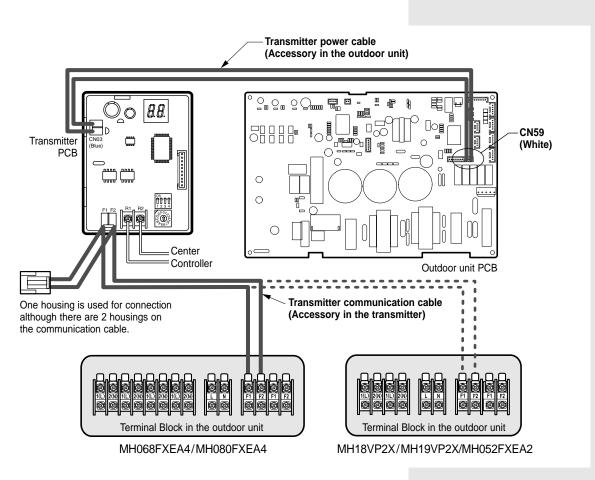


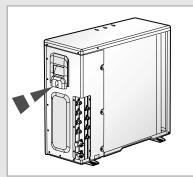


- 1 Fix the case with bolts on the control box in the outdoor unit. (See the picture)
- Attach the transmitter PCB to the case in the control box in the outdoor unit, then connect the power and the communication cable between the transmitter and the outdoor unit; refer to the figure of page 15.
- 3 If you install a transmitter to an outdoor unit, every indoor unit which is connected to an outdoor unit can be controlled simultaneously.
- 4 Each outdoor unit connected to the same centralized controller has its own transmitter.

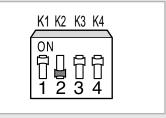


Fix the case with bolts (Control Box in the outdoor unit)





* The designs and shape are subject to change according to the model.

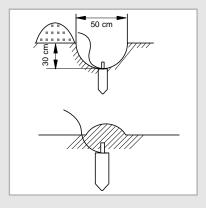


Change DIP switch-K2 in all indoor units PCB (K2 : ON → OFF)

Checking Correct Earthing

Carbon Steel plastic core

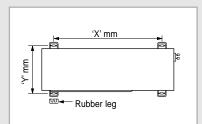
PVC-insulated green/ yellow wire, 2mm² x 3.5 m screw



If the power distribution circuit does not have an earth or the earth does not comply with specifications, an earthing electrode must be installed. The corresponding accessories are not supplied with the air conditioner.

- Select an earthing electrode that complies with the specifications given in the illustration opposite.
- **2** Determine a suitable location for the earthing electrode:
 - In damp hard soil rather than loose sandy or gravel soil that has a higher earthing resistance
 - Away from underground structures or facilities, such as gas pipes, water pipes, telephone lines and underground cables
 - At least two meters away from a lightening conductor earthing electrode and its cable
 - > The earthing wire for the telephone line cannot be used to earth the air conditioner.
- 3 Dig a hole of the size indicated in the illustration opposite, drive the earthing electrode into position and cover the top of the electrode with the excavated soil.
- 4 Install a green/yellow insulated earthing wire (Ø1.6 mm, section 2 mm² or greater):
 - If the earthing wire is too short, connect an extension lead, soldering the connection and wrapping it with insulating tape (do not bury the soldered connection)
 - Secure the earthing wire in position with staples
 - If the earthing electrode is installed in an area of heavy traffic, its wire must be connected securely.
- Carefully check the installation, by measuring the earthing resistance with an earthing resistance tester. If the resistance is above the required level(Example:100 Ω), drive the earthing electrode deeper into the ground or increase the number of earthing electrodes.
- 6 Connect the earthing wire to the earthing screw on the air conditioner.

Fixing the Unit in Position



Model	х	Y
MH18VP2X MH19VP2X MH052FXEA2	660	330
MH068FXEA4 MH080FXEA4	660	350

The outdoor unit must be installed on a rigid and stable base to avoid any increase in the noise level and vibration, particularly if the outdoor unit is to be installed close to a neighbour.

If it is to be installed in a location exposed to strong winds or at a height, the unit must be fixed to an appropriate support (wall or ground).

- Position the outdoor unit so that the air flow is directed towards the outside, as indicated by the arrows on the top of the unit.
- 2 Attach the outdoor unit to the appropriate support using anchor bolts.
- 3 If the outdoor unit is exposed to strong winds, install shield plates around the outdoor unit, so that the fan can operate correctly.
- Certainly fix up its rubber leg in order to prevent its vibration and noise.

Connecting Up and Purging the Circuit

CAUTION -

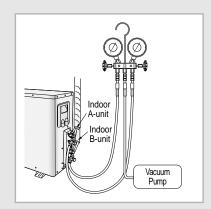
The air in the indoor unit and in the pipe must be purged. If air remains in the refrigeration pipes, it will affect the compressor, reduce to cooling/heating capacity and could lead to a malfuction. Refrigerant for air purging is not charged in the outdoor unit. Use Vacuum Pump as shown at the right figure. Each unit must be purged in turn.

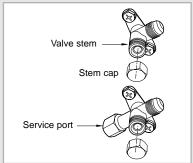
♦ MH18VP2X / MH19VP2X / MH052FXEA2

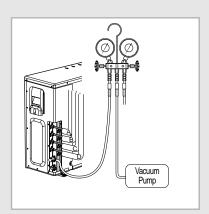
- 1 Check the piping connections.
- Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port (3/8" service valve) as shown at the figure.
- 3 Open the valve of the low pressure side of manifold gauge counter-clockwise.
- 4 Purge the air from the system using vacuum pump for about 10 minutes.
 - Close the valve of the low pressure side of manifold gauge clockwise.
 - Make sure that pressure gauge show -0.1MPa(-76cmHg) after about 10 minutes.
 - This procedure is very important in order to avoid gas leak.
 - Turn off the vacuum pump
 - Remove the hose of the low pressure side of manifold gauge.
- 5 Set valve cork of both liquid side and gas side of packed valve to the open position.
- Mount the valve stem nuts and the service port cap to the valve, and tighten them at the torque of 183kgf•cm with a torque wrench.
- 7 Check for gas leakage.
 - At this time, especially check for gas leakage from the 3-way valve's stem nuts, and from the service port cap.

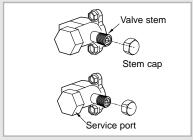
♦ MH068FXEA4 / MH080FXEA4

- 1 Check the piping connections.
- 2 Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port (5/8" Packed valve) as shown at the figure (Value stem: 1/2" 20UNF).
- Open the valve of the low pressure side of manifold gauge counter clockwise.
- 4 Purge the air from the system using vacuum pump for about 30 minutes.
 - Close the valve of the low pressure side of manifold gauge clockwise.
 - Make sure that pressure gauge show -0.1MPa(-76cmHg) after about 30 minutes.
 - This procedure is very important in order to avoid gas leak.
 - Turn off the vacuum pump.
 - Remove the hose of the low pressure side of manifold gauge.
- 5 Set valve cork of both liquid side and gas side of packed valve to the open position.
- 6 Mount the valve stem nuts and the service port cap to the valve, and tighten them at the torque of 183kgf•cm with a torque wrench.
- 7 Check for gas leakage.
 - At this time, especially check for gas leakage from the 3-way valve's stem nuts, and from the service port cap.









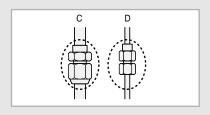
Adding Refrigerant

If you install the excessive length of pipe, add additional refrigerant as 15g per unit meter; refer to the table below.

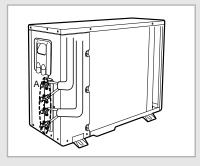
Refer to the Service Manual for more details on this operation.

Model	Total connecting pipe length(L)	Adding refrigerant
MH18VP2X MH19VP2X	L⊤ ≤ 20 m	Chargeless
MH052FXEA2	LT > 20 m	(LT - 20 m) x15g
MH068FXEA4	L⊤ ≤ 40 m	Chargeless
MH080FXEA4	LT > 40 m	(LT - 40 m) x15g

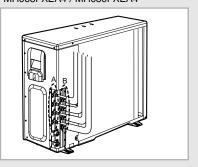
Performing Leak Tests



MH18VP2X / MH19VP2X / MH052FXEA2



MH068FXEA4 / MH080FXEA4



Before completing the installation (insulation of the cables, hose and piping and fixing of the indoor unit to the installation plate), you must check that there are no gas leaks.

To check for gas leaks on the	Then, using a leak detector, check the
Indoor unit	Flare nuts at the end of sections C and D.
Outdoor unit	Valves on sections A and B.

Pipe Installation with Indoor Units

♦ MH068FXEA4 / MH080FXEA4

Follow different orders depending on the capacity of indoor units.

MH026/035F*EA

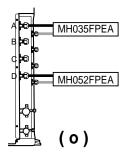
♦ Install pipes between indoor and outdoor units orderly as $[A \rightarrow B \rightarrow C \rightarrow D]$.

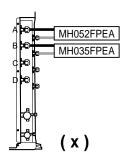
MH052F*EA

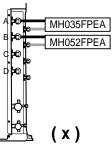
Install pipes between indoor and outdoor units orderly as [D → C].

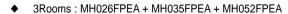
Examples

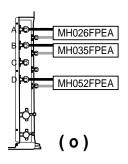
◆ 2Rooms: MH035FPEA + MH052FPEA

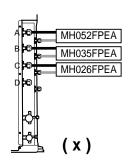


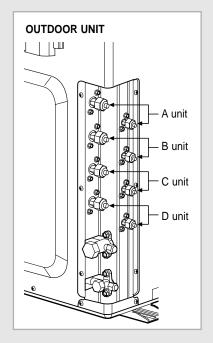


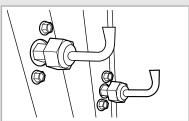




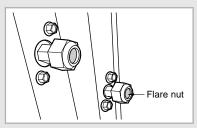






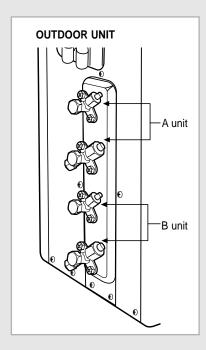


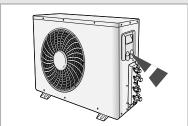
* The pinch pipe is installed initially on the part A.

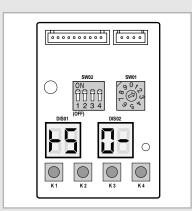


* If the pinch pipe is not installed, please screw the part A using the flare nut of the part B, C, or D.

Switch Setting and Testing Operation







Outdoor PCB Display

♦ MH18VP2X / MH19VP2X / MH052FXEA2

To complete the installation, perform the following checks and tests to ensure that the air conditioner is operating correctly.

Step 1 Review all the following elements in the installation:

- Installation site strength
- ◆ Piping connection tightness to detect any gas leakage
- ♦ Connection wiring
- Heat-resistant insulation of the piping
- Drainage
- Earthing wire connection

Step 2 Check the room select switch in the indoor unit and in the outdoor unit. Set the switch properly as below. (For example: 2 Rooms)

Indoor unit	A unit	B unit
Manual Addressing (For example: 2 Rooms)	SW02	SW02
Auto Addressing (For example: 2 Rooms)	W02	W02
Outdoor unit	SW 01	SW 02
Manual Addressing (For example: 2 Rooms)	9 L 9 G	ON F F F F F F F F F F F F F F F F F F F
Auto Addressing (For example: 2 Rooms)	8 0 7 2 3 4 1 0 9 9	ON PROPERTY OF THE PROPERTY OF

- The liquid and gas refrigerant pipes should not be crossed with each other.
- ◆ The switch for the indoor unit address setting is in each indoor unit PCB.
- The manual addressing number of the indoor unit must be set as above. (A unit → 0, B unit → 1)

Step 3 Automated checking of pipe connection (Auto addressing option)

- Apply the power to the outdoor unit.
- ◆ Push the [K2] button 4 times in the outdoor PCB display.

	Button [K2] 4 times		
	DIS 01	DIS 02	
Display	85		
	[DIS 01] is flickering on the setting time.		
	Outdoor Temperature		
Time duration	15°C or more	Less than 15°C	
Time duration	(Cool mode)	(Heat mode)	
	3 min ~ 5 min	20 min ~ 30 min	

- It could take more time depending on the indoor and outdoor temperature.
- If the checking is finished, outdoor unit stops automatically.
- [DIS 02] shows the indoor unit under searching.
- ♦ Function of Step 3

Mode	Function
Auto Addressing	Checking the connection & addressing
Manual Addressing	Checking the connection only

♦ MH068FXEA4 / MH080FXEA4

To complete the installation, perform the following checks and tests to ensure that the air conditioner is operating correctly.

Step 1 Review all the following elements in the installation:

- ◆ Installation site strength
- ◆ Piping connection tightness to detect any gas leakage
- Connection wiring
- ♦ Heat-resistant insulation of the piping
- ◆ Drainage
- ♦ Earthing wire connection

Step 2 Check the room select switch in the indoor unit and in the outdoor unit. Set the switch properly as below. (For example: 4 Rooms)

Indoor unit	A unit	B unit	C unit	D unit
Manual Addressing (For example: 4 Rooms)	SW02	SW02	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3/ SW02
Auto Addressing (For example: 4 Rooms)	SW02	SW02	SW02	SW02

Outdoor unit	SW 01	SW 02
Manual Addressing (For example: 4 Rooms)	(S)	ON FINAL PROPERTY OF THE PROPE
Auto Addressing (For example: 4 Rooms)	(S)	ON 10 10 10 10 10 10 10 10 10 10 10 10 10

- ◆ The liquid and gas refrigerant pipes should not be crossed with each other.
- ◆ The switch for the indoor unit address setting is in each indoor unit PCB.
- The manual addressing number of the indoor unit must be set as above.
 (A unit → 0, B unit → 1, C unit → 2, D unit → 3)

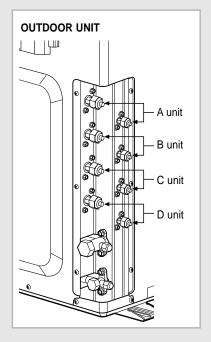
Step 3 Automated checking of pipe connection (Auto addressing option)

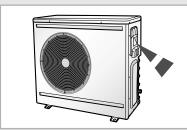
- ◆ Apply the power to the outdoor unit.
- ◆ Push the [K2] button 4 times in the outdoor PCB display.

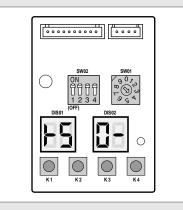
	Button [K2] 4 times				
	DIS 01	DIS 02			
Display	45				
	[DIS 01] is flickering on the setting time.				
	Outdoor Temperature				
Time duration	15°C or more	Less than 15°C			
inne duration	(Cool mode)	(Heat mode)			
	5 min ~ 10 min	20 min ~ 50 min			

- ♦ It could take more time depending on the indoor and outdoor temperature.
- If the checking is finished, outdoor unit stops automatically.
- [DIS 02] shows the indoor unit under searching.
- ♦ Function of Step 3

Mode	Function
Auto Addressing	Checking the connection & addressing
Manual Addressing	Checking the connection only







Outdoor PCB Display

Switch Setting and Testing Operation (Continued)

Step 4 Testing operation (Indoor unit)

Press the (1) button.

Result:

◆ The indicator lights on the indoor unit flash at half-second

◆ While the indoor unit opens, the indoor unit fan runs to start.

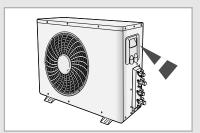
Press the button.

Air flow direction

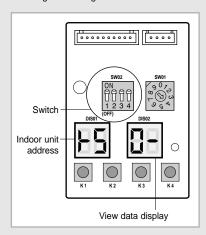
Result: The outdoor unit operates in cooling or heating mode as following the room temperature.

Press the button and check that the air flow blades work properly.

> It could take maximum 60 minutes to operate for the protection of the compressor if the outdoor temperature is below -5°C.



* The designs and shape are subject to change according to the model.



Outdoor PCB Display

Ampere Limit Setting & Changing Procedure

! WARNING

- Do not adjust the "Ampere Limit Switch", because it needs to meet HDB requirement or Local authorities.
- ◆ "Ampere Limit Switch" is initially set to the default value (table below).
- ◆ "Ampere Limit Switch" is on the PCB of outdoor unit.
- Contact the authorized service technician or dealer for setting and changing the "Ampere Limit Switch".
- Before changing the "Ampere Limit Switch", turn off the main power of the system.
- Please refer to the lower figure and table.

	Switch S	Selection		
MH18VP2X MH19VP2X MH052FXEA2	MH19VP2X MH068FXEA4 S		3	4
13.0A (Default)	17.0A (Default)	ON 1 2 3 4 (OFF)	ON	ON
12.0A	14.0A	ON 1 2 3 4 (OFF)	ON	OFF
10.0A	11.0A	ON	OFF	ON
8.0A	10.0A	ON	OFF	OFF

Settings of PCB Display of the Outdoor unit

♦ Key Options of PCB Display

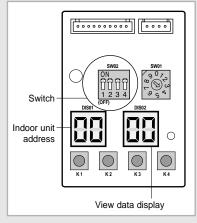
- K1 : Test button - K2 : Function button

- K3 : Reset button - K4 : View mode change button

Key Push	K1 K2		КЗ	K4
1	Heat mode Try-run (Display: -)	Refrigerant Charging (Display: - 2)		
2	-	Cool mode Try-run (Display: 📙 🖥)	Reset	View mode
3	-	Pump down (Display: - - - - - - - - - - - - -	rtocot	change
4	-	Checking of pipe connection (Display: -5)		

♦ K4 View mode Display changes

Push	Display Explanation	Push	Display Explanation
0	Present Compressor Frequency	8	Discharge temperature
1	Target Compressor Frequency	9	OLP temperature
2	Order Compressor Frequency	10	Condenser temperature
3	EEV0 current step	11	Outdoor temperature
4	EEV1 current step	12	First current
5	EEV2 current step	13	Target Discharge temperature
6	EEV3 current step	14	Total capacity of the indoor units
7	Fan RPM (H: high, L: low, Blank: off)	15	Safety control



Outdoor PCB Display

Troubleshooting

The error indicated on the PCB display of outdoor unit

DISF	PLAY	EXPLANATION	REMARK
E		Communication error (indoor unable to receive data)	
E	02	Outdoor unit communication error (Abnormal data from indoor unit over 60 packet)	
E	21	Indoor unit room temperature sensor error (Open/Short)	
ПП 	22	Indoor unit heat exchanger in temperature sensor error (Open/Short)	
E	23	Indoor unit heat exchanger out temperature sensor error (Open/Short)	
П 	28	Indoor unit sensor error-Evaporator pipe in sensor	
E	29	Indoor unit sensor error-Evaporator pipe out sensor	
11	30	Indoor unit sensor error-Evaporator pipe in and out sensor all	
E :	5:	More than two indoor units cool and heat simultaneously	
E2		The number of Indoor unit mismatched	
52		Communication error between the outdoor and indoor unit	
E2	83	Outdoor communication error between main PCB and sub PCB	
E2	21	Outside temperature sensor error(Short/Open) - Error level: over 4.9V(-50°C) under 0.4V(93°C)	
E2	37	Condenser temperature sensor error(Short/Open) - Error level: over 4.9V(-50°C) under 0.4V(93°C)	
E2	45	Outdoor unit sensor error - Condenser out sensor (Short/Open)	
62	60	Compressor discharge sensor error (Short/Open) - Error condition : outdoor temperature under -10°C - Error level : over 4.95V(-30°C) under 0.5V(151°C)	
E2	5 :	Compressor discharge sensor detached	
E3	50	Compressor OLP sensor error (Short/Open) - Error condition : outdoor temperature under -20°C - Error level : over 4.95V(-30°C) under 0.5V(151°C)	

Troubleshooting (Continued)

The error indicated on the PCB display of outdoor unit

EY II Outdoor unit freezing(Compressor stop) EY II Outdoor unit overload - Safety control (Compressor stop) EY II Outdoor unit high discharge temperature - Safety control (Compressor stop) EY II Outdoor unit EEV open - Self diagnosis EY II Outdoor unit EEV close - Self diagnosis EY II High temperature (over 30°C) of outdoor as heating mode EY II Low temperature (under -5°C) of indoor as cooling mode EY II Communication cable mismatched between indoor and outdoor unit
EY 16 Outdoor unit high discharge temperature - Safety control (Compressor stop) EY 19 Outdoor unit EEV open - Self diagnosis EY 22 Outdoor unit EEV close - Self diagnosis EY 40 High temperature (over 30°C) of outdoor as heating mode EY 41 Low temperature (under -5°C) of indoor as cooling mode EY 50 Communication cable mismatched between indoor and outdoor unit
Compressor stop) EY 19 Outdoor unit EEV open-Self diagnosis EY 22 Outdoor unit EEV close-Self diagnosis EY 41 High temperature (over 30°C) of outdoor as heating mode EY 41 Low temperature (under -5°C) of indoor as cooling mode EY 50 Communication cable mismatched between indoor and outdoor unit
EY ZZ Outdoor unit EEV close-Self diagnosis EY Y High temperature (over 30°C) of outdoor as heating mode EY Y Low temperature (under -5°C) of indoor as cooling mode Communication cable mismatched between indoor and outdoor unit
High temperature (over 30°C) of outdoor as heating mode Low temperature (under -5°C) of indoor as cooling mode Communication cable mismatched between indoor and outdoor unit
EY U Low temperature (under -5°C) of indoor as cooling mode Communication cable mismatched between indoor and outdoor unit
Communication cable mismatched between indoor and outdoor unit
and outdoor unit
EH Inverter compressor starting failure (5 times)
E4 62 Compressor trip by input current control mode
E4 63 Compressor trip by OLP temperature control mode
E4 E4 DC peak error
E4 55 Full ampere compressor trip (Over 30A)
EY 55 DC link error (under 150V, over 410V)
E4 57 Abnormal compressor running
E4 68 Current sensor error
E4 69 DC link sensor error
Compressor trip (over input current 24A, under minimum running frequency)
EY 7 (EEPROM read/write failure
E4 72 Inverter micom zero-crossing error
E5 54 Leak on outdoor unit under self diagnosis

Remark *: Check the pipe connections with the address of the indoor units.

Explaining Operations to the Owner

Before leaving the premises on which you have installed the air conditioner, you should explain the following operations to the owner, making reference to the appropriate pages in the owner's instruction booklet.

- 1 How to start and stop the air conditioner.
- 2 How to select the operating mode and adjust the temperature and fan settings.
- 3 How to adjust the air flow direction.
- 4 How to set the timers.
- 5 How to remove and clean the filters.
- Once the owner is happy with the basic operations, hand over the owner's instruction booklet and this installation manual for storage in a handy and safe place.

Combination Table

MH052FXEA2 (Current Limited 10A - Cooling)

Conversion formula: kW=Btu/h x 0.000293

				Current Limited 10A					
Outdoor unit	Indoor unit combination				Capacity (W) Power Consumption			Operating Current	
	Α	В	Total	А	В	Total	(W)	(A)	
1 Unit	2000		2000	2000		2000	770	3.6	
	2600		2600	2600		2600	800	3.8	
	3500		3500	3500		3500	1000	4.7	
2 Unit	2000	2000	4000	2000	2000	4000	1350	6.2	
	2000	2600	4600	2000	2600	4600	1410	6.4	
	2600 *1)	2600 *1)		2600*1)	2600 *1)	5200 *1)	1500 *1)	6.7 *1)	
	2000 *2)	3500 *2)	5500 *2)	2500* ²⁾	3000 *2)	5500 *2)	1600 *2)	7.1 * ²⁾	
	2600	3500	6100	2800	3100	5900	1950	8.7	
	3500	3500	7000	3250	3250	6500	2160	9.5	

⁻ MH18VP2X model is applicable for *1) in the table above. MH19VP2X model is applicable for *2) in the table above.

MH052FXEA2 (Current Limited 10A - Heating)

Conversion formula: kW=Btu/h x 0.000293

				Current Limited 10A					
Outdoor unit	Indoor unit combination			Capacity (W)			Power Consumption	Operating Current	
Car in C	Α	В	Total	Α	В	Total	(W)	(A)	
1 Unit	2200		2200	2200		2200	850	3.9	
	2900		2900	2900		2900	1150	5.3	
	3800		3800	3800		3800	1560	7.0	
2 Unit	2200	2200	4400	2200	2200	4400	1600	7.1	
	2200	2900	5100	2200	2900	5100	1760	7.8	
	2900 *1)	2900 *1)	5800 *1)	2900*1)	2900 *1)	5800 *1)	1805 *1)	8.2 *1)	
	2200 *2)	3800 *2)	6000 *2)	2500* ²⁾	3500 * ²⁾	6000 *2)	1850 * ²⁾	8.5 *2)	
	2900	3800	6700	2900	3670	6570	2190	9.7	
	3800	3800	7600	3650	3650	7300	2190	9.7	

⁻ MH18VP2X model is applicable for *1) in the table above. MH19VP2X model is applicable for *2) in the table above.

MH052FXEA2 (Full Load Ampere - Cooling)

Conversion formula: kW=Btu/h x 0.000293

	(, 									
	ll			Full Load Ampere									
Outdoor unit	inaoor	unit comb	ination		Capacity (W)		Power Consumption	Operating Current					
ann	Α	В	Total	Α	В	Total	(W)	(A)					
1 Unit	2000		2000	2000		2000	770	3.6					
	2600		2600	2600		2600	800	3.8					
	3500		3500	3500		3500	1000	4.7					
2 Unit	2000	2000	4000	2000	2000	4000	1350	6.2					
	2000	2600	4600	2000	2600	4600	1410	6.4					
	2600 *1)	2600*1)	5200*1)	2600*1)	2600*1)	5200*1)	1500*1)	6.7*1)					
	2000 *2)	3500* ²⁾	5500* ²⁾	2500* ²⁾	3000*2)	5500*2)	1600* ²⁾	7.1 *2)					
	2600 3500 6		6100	2800	3100	5900	1950	8.7					
	3500 3500 7000		7000	3250	3250	6500	2160	9.5					

⁻ MH18VP2X model is applicable for *1) in the table above. MH19VP2X model is applicable for *2) in the table above.

MH052FXEA2 (Full Load Ampere - Heating)

	1		·	Full Load Ampere									
Outdoor unit	Indoor	unit comb	ination		Capacity (W)		Power Consumption	Operating Current					
ant	Α	В	Total	Α	В	Total	(W)	(A)					
1 Unit	2200		2200	2200		2200	850	3.9					
	2900		2900	2900		2900	1150	5.3					
	3800		3800	3800		3800	1560	7.0					
2 Unit	2200	2200	4400	2200	2200	4400	1600	7.1					
	2200	2900	5100	2200	2900	5100	1760	7.8					
	2900 *1)	2900*1)	5800*1)	2900*1)	2900*1)	5800*1)	1805*1)	8.2*1)					
	2200 *2)	3800*2)	6000*2)	2500* ²⁾	3500* ²⁾	6000*2)	1850* ²⁾	8.5 * ²⁾					
	2900	3800	6700	2900	3670	6570	2190	9.7					
	3800	3800	7600	3650	3650	7300	2420	10.7					

⁻ MH18VP2X model is applicable for *1) in the table above. MH19VP2X model is applicable for *2) in the table above.

* Indoor unit combination 2600 in the table below means that both MH023FPEA and MH026FPEA models can be applicable.

MH068FXEA4 (Current Limited 10A - Cooling)

Conversion formula: kW=Btu/h x 0.000293

							Currei	nt Limite	ed 10A		
Outdoor unit	Inde	oor unit	combina	ition		C		Power Consumption	Operating Current		
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)
1 Unit	2600				2600				2600	830	3.9
	3500				3500				3500	1115	5.2
	5200				5200				5200	1550	7.0
2 Unit	2600	2600			2600	2600			5200	1408	6.3
	2600	3500			2600	3500			6100	1645	7.4
	2600	5200			2489	4978			7467	2140	9.4
	3500	3500			3412	3412			6824	1910	8.5
	3500	5200			2962	4401			7363	2154	9.5
	5200	5200			3761	3761			7522	2157	9.4
3 Unit	2600	2600	2600		2508	2508	2508		7524	2147	9.5
	2600	2600	3500		2248	2248	3027		7523	2150	9.5
	2600	2600	5200		1881	1881	3761		7522	2147	9.3
	2600	3500	3500		2037	2742	2742		7522	2151	9.4
	2600	3500	5200		1757	2365	3513		7635	2144	9.3
	3500	3500	3500		2512	2512	2512		7535	2152	9.4
	3500	3500	5200		2222	2222	3301		7745	2141	9.3
4 Unit	2600	2600	2600	2600	1881	1881	1881	1881	7522	2137	9.3
	2600	2600	2600	3500	1757	1757	1757	2365	7635	2134	9.3

MH068FXEA4 (Current Limited 10A - Heating)

							Currei	nt Limite	ed 10A		
Outdoor unit	Ind	oor unit	combina	ition		C	Power Consumption	Operating Current			
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)
1 Unit	2900				2900				2900	1230	5.6
	3800				3800				3800	1615	7.2
	5600				5385				5385	2162	9.7
2 Unit	2900	2900			2599	2599			5197	2189	9.6
	2900	3800			2544	3333			5877	2177	9.6
	2900	5600			2437	4706			7143	2144	9.5
	3800	3800			3262	3262			6524	2163	9.6
	3800	5600			2985	4399			7385	2135	9.5
	5600	5600			3933	3933			7866	2110	9.4
3 Unit	2900	2900	2900		2398	2398	2398		7195	2133	9.5
	2900	2900	3800		2246	2246	2944		7436	2123	9.3
	2900	2900	5600		2014	2014	3889		7917	2098	9.3
	2900	3800	3800		2120	2779	2779		7678	2113	9.4
	2900	3800	5600		1851	2425	3574		7850	2123	9.3
	3800	3800	3800		2639	2639	2639		7917	2103	9.4
	3800	3800	5600		2331	2331	3436		8099	2125	9.3
4 Unit	2900	2900	2900	2900	1975	1975	1975	1975	7899	2095	9.3
	2900	2900	2900	3800	1835	1835	1835	2404	7909	2115	9.3

Combination Table (Continued)

MH068FXEA4 (Full Load Ampere - Cooling)

Conversion formula: kW=Btu/h x 0.000293

					Full Load Ampere								
Outdoor unit	Inde	oor unit	combina	ition		С		Power Consumption	Operating Current				
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)		
1 Unit	2600				2600				2600	830	3.9		
	3500				3500				3500	1115	5.2		
	5200				5200				5200	1550	7.0		
2 Unit	2600	2600			2600	2600			5200	1408	6.3		
	2600	3500			2600	3500			6100	1645	7.4		
	2600	5200			2489	4978			7467	2140	9.4		
	3500	3500			3412	3412			6824	1910	8.5		
	3500	5200			3295	4895			8190	2405	10.6		
	5200	5200			4250	4250			8500	2450	10.7		
3 Unit	2600	2600	2600		2556	2556	2556		7668	2190	9.7		
	2600	2600	3500		2378	2378	3201		7956	2279	10.0		
	2600	2600	5200		2125	2125	4250		8500	2440	10.6		
	2600	3500	3500		2233	3005	3005		8243	2367	10.4		
	2600	3500	5200		2003	2696	4006		8706	2461	10.7		
	3500	3500	3500		2841	2841	2841		8523	2448	10.7		
	3500	3500	5200		2555	2555	3790		8900	2470	10.8		
4 Unit	2600	2600	2600	2600	2125	2125	2125	2125	8500	2430	10.6		
	2600	2600	2600	3500	2003	2003	2003	2696	8706	2451	10.7		

MH068FXEA4 (Full Load Ampere - Heating)

					Full Load Ampere								
Outdoor unit	Ind	oor unit	combina	ation		C	Capacity (V	V)		Power Consumption	Operating Current		
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)		
1 Unit	2900				2900				2900	1230	5.6		
	3800				3800				3800	1615	7.2		
	5600				5600				5600	2250	10.1		
2 Unit	2900	2900			2900	2900			5800	2450	10.8		
	2900	3800			2900	3800			6700	2491	11.0		
	2900	5600			2900	5600			8500	2567	11.4		
-	3800	3800			3800	3800			7600	2531	11.3		
	3800	5600			3561	5249			8810	2563	11.4		
	5600	5600			4716	4716			9431	2550	11.4		
3 Unit	2900	2900	2900		2856	2856	2856		8569	2557	11.4		
	2900	2900	3800		2682	2682	3515		8879	2553	11.4		
	2900	2900	5600		2417	2417	4667		9500	2540	11.3		
	2900	3800	3800		2538	3326	3326		9190	2549	11.4		
	2900	3800	5600		2351	3081	4541		9973	2705	11.9		
	3800	3800	3800		3167	3167	3167		9500	2545	11.4		
	3800	3800	5600		2970	2970	4360		10300	2705	11.9		
4 Unit	2900	2900	2900	2900	2401	2401	2401	2401	9605	2573	11.4		
	2900	2900	2900	3800	1968	1968	1968	2579	8483	2018	8.4		

MH080FXEA4 (Current Limited 10A - Cooling)

Conversion formula: kW=Btu/h x 0.000293

					e, comercial management plants of occupant								
					Current Limited 10A								
Outdoor unit	Ind	oor unit	combina	ation		С		Power Consumption	Operating Current				
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)		
1 Unit	2600				2600				2600	830	3.9		
=	3500				3500				3500	1115	5.2		
	5200				5200				5200	1550	7.0		
2 Unit	2600	2600			2600	2600			5200	1408	6.3		
	2600	3500			2600	3500			6100	1645	7.4		
	2600	5200			2489	4978			7467	2140	9.4		
	3500	3500			3412	3412			6824	1910	8.5		
	3500	5200			2962	4401			7363	2154	9.5		
	5200	5200			3761	3761			7522	2157	9.4		
3 Unit	2600	2600	2600		2508	2508	2508		7524	2147	9.5		
	2600	2600	3500		2248	2248	3027		7523	2150	9.5		
	2600	2600	5200		1881	1881	3761		7522	2147	9.3		
	2600	3500	3500		2037	2742	2742		7522	2151	9.4		
	2600	3500	5200		1757	2365	3513		7635	2144	9.3		
	2600	5200	5200		1568	3137	3137		7842	2133	9.2		
	3500	3500	3500		2512	2512	2512		7535	2152	9.4		
	3500	3500	5200		2222	2222	3301		7745	2141	9.3		
	3500	5200	5200		2001	2974	2974		7949	2130	9.2		
4 Unit	2600	2600	2600	2600	1881	1881	1881	1881	7522	2137	9.3		
	2600	2600	2600	3500	1757	1757	1757	2365	7635	2134	9.3		
	2600	2600	2600	5200	1568	1568	1568	3137	7842	2123	9.2		
	2600	2600	3500	3500	1651	1651	2222	2222	7745	2131	9.3		
	2600	2600	3500	5200	1487	1487	2001	2974	7949	2120	9.2		
	2600	3500	3500	3500	1559	2098	2098	2098	7853	2128	9.3		

MH080FXEA4 (Current Limited 10A - Heating)

	`				Conversion formula. kvv=btu/ff x 0.00029.									
							Currei	nt Limite	ed 10A					
Outdoor unit	Ind	oor unit	combina	ition		C		Power Consumption	Operating Current					
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)			
1 Unit	2900				2900				2900	1230	5.6			
-	3800				3800				3800	1615	7.2			
	5600				5385				5385	2162	9.7			
2 Unit	2900	2900			2599	2599			5197	2189	9.6			
	2900	3800			2544	3333			5877	2177	9.6			
	2900	5600			2437	4706			7143	2144	9.5			
	3800	3800			3262	3262			6524	2163	9.6			
	3800	5600			2985	4399			7385	2135	9.5			
	5600	5600			3933	3933			7866	2110	9.4			
3 Unit	2900	2900	2900		2398	2398	2398		7195	2133	9.5			
_	2900	2900	3800		2246	2246	2944		7436	2123	9.5			
	2900	2900	5600		2014	2014	3889		7917	2098	9.3			
	2900	3800	3800		2120	2779	2779		7678	2113	9.4			
	2900	5600	5600		1722	3325	3325		8371	2123	9.3			
	2900	3800	5600		1851	2425	3574		7850	2130	9.2			
	3800	3800	3800		2639	2639	2639		7917	2103	9.4			
	3800	3800	5600		2331	2331	3436		8099	2125	9.3			
	3800	5600	5600		2177	3208	3208		8593	2125	9.2			
4 Unit	2900	2900	2900	2900	1975	1975	1975	1975	7899	2095	9.3			
	2900	2900	2900	3800	1835	1835	1835	2404	7909	2115	9.3			
	2900	2900	2900	5600	1704	1704	1704	3290	8402	2115	9.2			
	2900	2900	3800	3800	1765	1765	2313	2313	8156	2118	9.3			
	2900	2900	3800	5600	1650	1650	2163	3187	8651	2117	9.2			
	2900	3800	3800	3800	1704	2233	2233	2233	8402	2120	9.3			

Combination Table (Continued)

MH080FXEA4 (Full Load Ampere - Cooling)

Conversion formula: kW=Btu/h x 0.000293

					Full Load Ampere								
Outdoor unit	Ind	oor unit	combina	ation		С		Power Consumption	Operating Current				
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)		
1 Unit	2600				2600				2600	830	3.9		
	3500				3500				3500	1115	5.2		
	5200				5200				5200	1550	7.0		
2 Unit	2600	2600			2600	2600			5200	1408	6.3		
	2600	3500			2600	3500			6100	1645	7.4		
	2600	5200			2489	4978			7467	2140	9.4		
	3500	3500			3412	3412			6824	1910	8.5		
[3500	5200			3295	4895			8190	2405	10.6		
	5200	5200			4250	4250			8500	2450	10.7		
3 Unit	2600	2600	2600		2556	2556	2556		7668	2190	9.7		
[2600	2600	3500		2378	2378	3201		7956	2279	10.0		
	2600	2600	5200		2125	2125	4250		8500	2440	10.6		
	2600	3500	3500		2233	3005	3005		8243	2367	10.4		
[2600	3500	5200		2003	2696	4006		8706	2461	10.7		
	2600	5200	5200		1819	3638	3638		9094	2494	10.8		
	3500	3500	3500		2841	2841	2841		8523	2448	10.7		
	3500	3500	5200		2557	2557	3798		8911	2481	10.8		
	3500	5200	5200		2342	3479	3479		9300	2515	10.9		
4 Unit	2600	2600	2600	2600	2125	2125	2125	2125	8500	2430	10.6		
	2600	2600	2600	3500	2003	2003	2003	2696	8706	2451	10.7		
	2600	2600	2600	5200	1819	1819	1819	3638	9094	2484	10.8		
	2600	2600	3500	3500	1899	1899	2557	2557	8911	2471	10.8		
	2600	2600	3500	5200	1740	1740	2342	3479	9300	2505	10.9		
	2600	3500	3500	3500	1810	2436	2436	2436	9117	2492	10.9		

MH080FXEA4 (Full Load Ampere - Heating)

					Full Load Ampere								
Outdoor unit	Inde	oor unit	combina	ation		С	apacity (V	V)		Power Consumption	Operating Current		
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)		
1 Unit	2900				2900				2900	1230	5.6		
	3800				3800				3800	1615	7.2		
	5600				5600				5600	2250	10.1		
2 Unit	2900	2900			2900	2900			5800	2450	10.8		
	2900	3800			2900	3800			6700	2491	11.0		
	2900	5600			2900	5600			8500	2567	11.4		
	3800	3800			3800	3800			7600	2531	11.3		
	3800	5600			3561	5249			8810	2563	11.4		
	5600	5600			4716	4716			9431	2550	11.4		
3 Unit	2900	2900	2900		2856	2856	2856		8569	2557	11.4		
	2900	2900	3800		2682	2682	3515		8879	2553	11.4		
_	2900	2900	5600		2417	2417	4667		9500	2540	11.3		
	2900	3800	3800		2538	3326	3326		9190	2549	11.4		
	2900	3800	5600		2351	3081	4541		9973	2705	11.9		
	2900	5600	5600		2169	4189	4189		10548	2705	11.8		
	3800	3800	3800		3167	3167	3167		9500	2545	11.4		
	3800	3800	5600		2954	2954	4353		10261	2705	11.9		
	3800	5600	5600		2745	4045	4045		10836	2705	11.8		
4 Unit	2900	2900	2900	2900	2401	2401	2401	2401	9605	2573	11.4		
	2900	2900	2900	3800	2329	2329	2329	3051	10037	2705	11.9		
	2900	2900	2900	5600	2152	2152	2152	4156	10612	2705	11.8		
	2900	2900	3800	3800	2235	2235	2928	2928	10325	2705	11.9		
	2900	2900	3800	5600	2080	2080	2725	4016	10900	2705	11.9		
	2900	3800	3800	3800	2152	2820	2820	2820	10612	2705	11.9		

MH080FXEA4 (Full Load Ampere - Heating at the normal condition)

-														
							Full I	Load An	npere					
Outdoor unit	Inde	oor unit	combina	ition		C	apacity (V	V)		Power Consumption	Operating Current			
	Α	В	С	D	Α	В	С	D	Total	(W)	(A)			
1 Unit	2900				2900				2900	1230	5.6			
	3800				3800				3800	1615	7.2			
	5600				5600				5600	2250	10.1			
2 Unit	2900	2900			2900	2900			5800	2450	10.8			
	2900	3800			2900	3800			6700	2491	11.0			
	2900	5600			2900	5600			8500	2567	11.4			
	3800	3800			3800	3800			7600	2531	11.3			
	3800	5600			3561	5249			8810	2563	11.4			
	5600	5600			4716	4716			9431	2550	11.4			
3 Unit	2900	2900	2900		2856	2856	2856		8569	2557	11.4			
	2900	2900	3800		2682	2682	3515		8879	2553	11.4			
	2900	2900	5600		2417	2417	4667		9500	2540	11.3			
	2900	3800	3800		2538	3326	3326		9190	2549	11.4			
	2900	3800	5600		2351	3081	4541		9973	2705	11.9			
	2900	5600	5600		1832	3537	3537		8905	2004	8.8			
	3800	3800	3800		3167	3167	3167		9500	2545	11.4			
	3800	3800	5600		2954	2954	4353		10261	2705	11.9			
	3800	5600	5600		2400	3537	3537		9474	2135	9.4			
4 Unit	2900	2900	2900	2900	2401	2401	2401	2401	9605	2573	11.4			
	2900	2900	2900	3800	1968	1968	1968	2579	8483	2018	8.4			
	2900	2900	2900	5600	1832	1832	1832	3537	9032	2024	8.9			
•	2900	2900	3800	3800	1968	1968	2579	2579	9094	2167	9.0			
	2900	2900	3800	5600	1832	1832	2400	3537	9600	2155	9.5			
	2900	3800	3800	3800	1832	2400	2400	2400	9032	2029	8.9			

THIS AIR CONDITIONER IS MANUFACTURED BY:
ESTE AIRE ACONDICIONADO HA SIDO FABRICADO POR:
CE CLIMATISEUR EST FABRIQUE PAR:
QUESTO CONDIZIONATORE D'ARIA È PRODOTTO DA:
ESTE APARELHO DE AR CONDICIONADO É FABRICADO POR:
DIESE KLIMAANLAGE IST FABRIZIERT VON:
AYTH Η ΣΥΣΚΕΥΗ ΚΑΤΑΣΚΕΥΑΣΤΗΚΕ ΑΠΟ:
ЭΤΟΤ ΚΟΗДИЦИОНЕР ИЗГОТОВЛЕН ФИРМОЙ:

